-- 35. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof comprising a CD3-binding domain and a Pseudomonas exotoxin (PE) mutant, said PE mutant having ADP-ribosylating and translocation functions but substantially diminished cell-binding ability. --

-- 36. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof according to claim 35 wherein the CD3-binding domain comprises an anti-CD3 antibody or CD3-binding fragment thereof. --

-- 37. A recombinant immunotoxin polypeptide polypeptide or a pharmaceutically acceptable salt thereof according to claim 36 wherein the anti-CD3 antibody or CD3-binding fragment thereof binds an epitope on the ϵ chain of human CD3. --

-- 38. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof according to claim 36 wherein the anti-CD3 antibody or CD3-binding fragment thereof binds an epitope formed by the ϵ and γ chains of human CD3. --

-- 39. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof E2 according to claim 36 wherein the CD3-binding domain comprises a Fab fragment of an anti-CD3 antibody. --

-- 40. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof according to claim 36 wherein the CD3-binding domain comprises the Fv region, or a CD3-binding fragment thereof, of an anti-CD3 antibody. --

-- 41. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof according to claim 36 wherein the CD3-binding domain comprises monoclonal antibody UCHT-1 or a CD3-binding fragment thereof. --

-- 42. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof according to claim 36 wherein the CD3-binding domain comprises a single chain Fv of an anti-CD3 antibody. --

-- 43. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof according to claim 35 comprising a single chain Fv of UCHT-1 fused to a PE mutant essentially deleted of its cell-binding domain. --

-- 44. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof according to claim 43 wherein the PE mutant is PE38. --

-- 45. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof according to claim 43 consisting essentially of the single chain Fv of an anti-human CD3 antibody fused via the carboxy terminus thereof to a PE mutant essentially deleted of its cell-binding domain. --

-- 46. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof according to claim 45 having the formula V_L - L - V_H - C - PE mutant. --

-- 47. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof according to claim 46 wherein V_L and V_H are derived from UCHT-1 and the PE mutant is PE38. --

-- 48. A pharmaceutical composition comprising a recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof according to claim 35 in a pharmaceutically acceptable carrier. --

E2

-- 49. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof, wherein the polypeptide comprises the polypeptide coded for by the nucleotide sequence shown in Figure 15 (SEQ. ID. NO:2). --

-- 50. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof, wherein the polypeptide comprises the polypeptide encoded by the complement of a nucleotide sequence having at least 300 bases which hybridizes to the nucleotide sequence of claim 49 (SEQ. ID. NO:2) under stringent hybridization conditions. --

-- 51. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof according to claim 36, wherein the CD3-binding domain comprises the Fv region, or a CD3-binding fragment thereof of an antibody selected from: monoclonal antibody UCHT-1, an antibody having a variable region which is at least 90% identical to the variable region of UCHT-1 as determined by use of the Bestfit program and is at least about 90% as effective on a molar basis in competing with UCHT-1 for binding to human CD3 antigen and having at least one sequence segment of at least five amino acids of human origin. --

- 52. A recombinant immunotoxin polypeptide or a pharmaceutically acceptable salt thereof according to claim 51, wherein the Fv region is a single-chain Fv. --